

Ungar

CRF Errors Corrected by the STIC Systems Branch

Serial Number:

08/482,402A

CRF Processing Date:

9/10/2001

Edited by:

Verified by:

(STIC 51a)

ENTERED

- ☐ Changed a file from non-ASCII to ASCII
- ☐ Changed the margins in cases where the sequence text was "wrapped" down to the next line.
- ☐ Edited a format error in the Current Application Data section, specifically:
- ☐ Edited the Current Application Data section with the actual current number. The number inputted by the applicant was ☐ the prior application data; or ☐ other
- ☐ Added the mandatory heading and subheadings for "Current Application Data".
- ☐ Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.
- ☐ Changed the spelling of a mandatory field (the headings or subheadings), specifically:
- ☐ Corrected the SEO ID NO when obviously incorrect. The sequence numbers that were edited were:
- ☐ Inserted or corrected a nucleic number at the end of a nucleic line. SEO ID NO's edited:
- ☐ Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.
- ☐ Inserted colons after headings/subheadings. Headings edited included:
- ☐ Deleted extra, invalid, headings-used by an applicant, specifically:
- ☐ Deleted: ☐ non-ASCII "garbage" at the beginning/end of files; ☐ secretary initials/surname at end of file; ☐ page numbers throughout text; ☐ other invalid text, such as
- ☐ Inserted mandatory headings, specifically:
- ☒ Corrected an obvious error in the response, specifically:  
41507 response
- ☐ Edited identifiers where upper case is used but lower case is required, or vice versa.
- ☐ Corrected an error in the Number of Sequences field, specifically:
- ☐ A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.
- ☐ Deleted ending stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected:
- ☐ Other:

Examiner: The above corrections must be communicated to the applicant in the first Office Action. DO NOT send a copy of this form.

3/1/95

RAW SEQUENCE LISTING  
 PATENT APPLICATION: US/08/482,402A

DATE: 09/10/2001  
 TIME: 16:06:27

Input Set : A:\Pto.amc  
 Output Set: N:\CRF3\09102001\H482402A.raw

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 THYROID  
 6 PEROXIDASE  
 8 <130> FILE REFERENCE: A1697DIV3  
 10 <140> CURRENT APPLICATION NUMBER: 08/482,402A  
 11 <141> CURRENT FILING DATE: 1996-06-07  
 13 <150> PRIOR APPLICATION NUMBER: US 08/196,082  
 14 <151> PRIOR FILING DATE: 1994-03-03  
 16 <150> PRIOR APPLICATION NUMBER: US 08/182,117  
 17 <151> PRIOR FILING DATE: 1994-01-27  
 19 <150> PRIOR APPLICATION NUMBER: PCT/US92/07381  
 20 <151> PRIOR FILING DATE: 1992-08-28  
 22 <150> PRIOR APPLICATION NUMBER: PCT/US92/06283  
 23 <151> PRIOR FILING DATE: 1992-07-30  
 25 <150> PRIOR APPLICATION NUMBER: US 07/750,579  
 26 <151> PRIOR FILING DATE: 1991-08-28  
 28 <150> PRIOR APPLICATION NUMBER: US 07/738,040  
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 31 <150> PRIOR APPLICATION NUMBER: US 07/559,955  
 32 <151> PRIOR FILING DATE: 1990-07-31  
 34 <150> PRIOR APPLICATION NUMBER: US 07/472,070  
 35 <151> PRIOR FILING DATE: 1990-01-30  
 37 <150> PRIOR APPLICATION NUMBER: US 07/388,044  
 38 <151> PRIOR FILING DATE: 1989-07-31  
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 70 Met Arg Ala Leu Ala Val Leu Ser Val  
 71 1 5  
 73 acg ctg gtt atg gcc tgc aca gaa gcc ttc ttc ccc ttc atc tcg aga 159

## RAW SEQUENCE LISTING

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DATE: 09/10/2001

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Output Set: N:\CRF3\09102001\H482402A.raw

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79 30 35 40
81 gtc ttg gag gaa agc aag cgc ctg gtg gac acc gcc atg tac gcc acg 255
82 Val Leu Glu Glu Ser Lys Arg Leu Val Asp Thr Ala Met Tyr Ala Thr
83 45 50 55
85 atg cag aga aac ctc aag aaa aga gga atc ctt tct gga gct cag ctt 303
86 Met Gln Arg Asn Leu Lys Lys Arg Gly Ile Leu Ser Gly Ala Gln Leu
87 60 65 70
89 ctg tct ttt tcc aaa ctt cct gag cca aca agc gga gtg att gcc cga 351
90 Leu Ser Phe Ser Lys Leu Pro Glu Pro Thr Ser Gly Val Ile Ala Arg
91 75 80 85
93 gca gca gag ata atg gaa aca tca ata caa gcg atg aaa aga aaa gtc 399
94 Ala Ala Glu Ile Met Glu Thr Ser Ile Gln Ala Met Lys Arg Lys Val
95 90 95 100 105
97 aac ctg aaa act caa caa tca cag cat cca acg gat gct tta tca gaa 447
98 Asn Leu Lys Thr Gln Gln Ser Gln His Pro Thr Asp Ala Leu Ser Glu
99 110 115 120
101 gat ctg ctg agc atc att gca aac atg tct tct gga tgt ctc cct tac atg 495
102 Asp Leu Leu Ser Ile Ile Ala Asn Met Ser Gly Cys Leu Pro Tyr Met
103 125 130 135
105 ctg ccc cca aaa tgc cca aac act tgc ctg gcg aac aaa tac agg ccc 543
106 Leu Pro Pro Lys Cys Pro Asn Thr Cys Leu Ala Asn Lys Tyr Arg Pro
107 140 145 150
109 atc aca gga gct tgc aac aac aga gac cac ccc aga tgg ggc gcc tcc 591
110 Ile Thr Gly Ala Cys Asn Asn Arg Asp His Pro Arg Trp Gly Ala Ser
111 155 160 165
113 aac acg gcc ctg gca cga tgg ctc cct cca gtc tat gag gac ggc ttc 639
114 Asn Thr Ala Leu Ala Arg Trp Leu Pro Pro Val Tyr Glu Asp Gly Phe
115 170 175 180 185
117 agt cag ccc cga ggc tgg aac ccc ggc ttc ttg tac aac ggg ttc cca 687
118 Ser Gln Pro Arg Gly Trp Asn Pro Gly Phe Leu Tyr Asn Gly Phe Pro
119 190 195 200
121 ctg ccc ccg gtc cgg gag gtg aca aga cat gtc att caa gtt tca aat 735
122 Leu Pro Pro Val Arg Glu Val Thr Arg His Val Ile Gln Val Ser Asn
123 205 210 215
125 gag gtt gtc aca gat gat gac cgc tat tct gac ctc ctg atg gca tgg 783
126 Glu Val Val Thr Asp Asp Asp Arg Tyr Ser Asp Leu Leu Met Ala Trp
127 220 225 230
129 gga caa tac atc gac cac gac atc gcg ttc aca cca cag agc acc agc 831
130 Gly Gln Tyr Ile Asp His Asp Ile Ala Phe Thr Pro Gln Ser Thr Ser
131 235 240 245
133 aaa gct gcc ttc ggg gga ggg tct gac tgc cag atg act tgt gag aac 879
134 Lys Ala Ala Phe Gly Gly Gly Ser Asp Cys Gln Met Thr Cys Glu Asn
135 250 255 260 265
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Input Set : A:\Pto.amc

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142	Ala Gly Thr Ala Cys Leu Pro Phe Tyr Arg Ser Ser Ala Ala Cys Gly						
143		285		290		295	
145	acc ggg gac caa ggc gcg ctc ttt ggg aac ctg tcc acg gcc aac ccg						1023
146	Thr Gly Asp Gln Met Asn Gly Leu Thr Ser Phe Gly Asn Leu Ser Thr Ala Asn Pro						
147		300		305		310	
149	agg cag cag atg aac ggg ttg acc tgc ttc ctg gac gcg tcc acc gtg						1071
150	Arg Gln Gln Met Asn Gly Leu Thr Ser Phe Leu Asp Ala Ser Thr Val						
151		315		320		325	
153	tat ggc agc tcc ccg gcc cta gag agg cag ctg cgg aac tgg acc agt						1119
154	Tyr Gly Ser Ser Pro Ala Leu Glu Arg Gln Leu Arg Asn Trp Thr Ser						
155	330		335		340		345
157	gcc gaa ggg ctg ctc cgc gtc cac ggc cgc ctc cgg gac tcc ggc cgc						1167
158	Ala Glu Gly Leu Leu Arg Val His Gly Arg Leu Arg Asp Ser Gly Arg						
159		350		355		360	
161	gcc tac ctg ccc ttc gtg ccg cca cgc gcg cct gcg gcc tgt gcg ccc						1215
162	Ala Tyr Leu Pro Phe Val Pro Pro Arg Ala Pro Ala Ala Cys Ala Pro						
163		365		370		375	
165	gag ccc ggc aac ccc gga gag acc cgc ggg ccc tgc ttc ctg gcc gga						1263
166	Glu Pro Gly Asn Pro Gly Glu Thr Arg Gly Pro Cys Phe Leu Ala Gly						
167		380		385		390	
169	gac ggc cgc gcc agc gag gtc ccc tcc ctg acg gca ctg cac acg ctg						1311
170	Asp Gly Arg Ala Ser Glu Val Pro Ser Leu Thr Ala Leu His Thr Leu						
171		395		400		405	
173	tgg ctg cgc gag cac aac cgc ctg gcc gcg gcg ctc aag gcc ctc aat						1359
174	Trp Leu Arg Glu His Asn Arg Leu Ala Ala Ala Leu Lys Ala Leu Asn						
175	410		415		420		425
177	gcg cac tgg agc gcg gac gcc gtg tac cag gag gcg cgc aag gtc gtg						1407
178	Ala His Trp Ser Ala Asp Ala Val Tyr Gln Glu Ala Arg Lys Val Val						
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181	ggc gct ctg cac cag atc atc acc ctg agg gat tac atc ccc agg atc						1455
182	Gly Ala Leu His Gln Ile Ile Thr Leu Arg Asp Tyr Ile Pro Arg Ile						
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185	ctg gga ccc gag gcc ttc cag cag tac gtg ggt ccc tat gaa gcc tat						1503
186	Leu Gly Pro Glu Ala Phe Gln Gln Tyr Val Gly Pro Tyr Glu Gly Tyr						
187		460		465		470	
189	gac tcc acc gcc aac ccc act gtg tcc aac gtg ttc tcc aca gcc gcc						1551
190	Asp Ser Thr Ala Asn Pro Thr Val Ser Asn Val Phe Ser Thr Ala Ala						
191		475		480		485	
193	ttc cgc ttc gcc cat gcc acg atc cac ccg ctg gtg agg agg ctg gac						1599
194	Phe Arg Phe Gly His Ala Thr Ile His Pro Leu Val Arg Arg Leu Asp						
195	490		495		500		505
197	gcc agc ttc cag gag cac ccc gac ctg ccc ggg ctg tgg ctg cac cag						1647
198	Ala Ser Phe Gln Glu His Pro Asp Leu Pro Gly Leu Trp Leu His Gln						
199		510		515		520	
201	gct ttc ttc agc cca tgg aca tta ctc cgt gga ggt ggt ttg gac cca						1695
202	Ala Phe Phe Ser Pro Trp Thr Leu Leu Arg Gly Gly Leu Asp Pro						
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TIME: 16:06:27

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Output Set: N:\CRF3\09102001\H482402A.raw

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207			540						545				550				
209	cag	ctg	atg	aac	gag	gag	ctg	acg	gaa	agg	ctc	ttt	gtg	ctg	tcc	aat	1791
210	Gln	Leu	Met	Asn	Glu	Glu	Leu	Thr	Glu	Arg	Leu	Phe	Val	Leu	Ser	Asn	
211			555				560					565					
213	tcc	agc	acc	ttg	gat	ctg	gcg	tcc	atc	aac	ctg	cag	agg	ggc	cgg	gac	1839
214	Ser	Ser	Thr	Leu	Asp	Leu	Ala	Ser	Ile	Asn	Leu	Gln	Arg	Gly	Arg	Asp	
215	570					575					580					585	
217	cac	ggg	ctg	cca	ggt	tac	aat	gag	tgg	agg	gag	ttc	tgc	ggc	ctg	cct	1887
218	His	Gly	Leu	Pro	Gly	Tyr	Asn	Glu	Trp	Arg	Glu	Phe	Cys	Gly	Leu	Pro	
219				590					595						600		
221	cgc	ctg	gag	acc	ccc	gct	gac	ctg	agc	aca	gcc	atc	gcc	agc	agg	agc	1935
222	Arg	Leu	Glu	Thr	Pro	Ala	Asp	Leu	Ser	Thr	Ala	Ile	Ala	Ser	Arg	Ser	
223				605					610					615			
225	gtg	gcc	gac	aag	atc	ctg	gac	ttg	tac	aag	cat	cct	gac	aac	atc	gat	1983
226	Val	Ala	Asp	Lys	Ile	Leu	Asp	Leu	Tyr	Lys	His	Pro	Asp	Asn	Ile	Asp	
227			620					625					630				
229	gtc	tgg	ctg	gga	ggc	tta	gct	gaa	aac	ttc	ctc	ccc	agg	gct	cgg	aca	2031
230	Val	Trp	Leu	Gly	Gly	Leu	Ala	Glu	Asn	Phe	Leu	Pro	Arg	Ala	Arg	Thr	
231			635				640					645					
233	ggg	ccc	ctg	ttt	gcc	tgt	ctc	att	ggg	aag	cag	atg	aag	gct	ctg	cgg	2079
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237	gac	ggt	gac	tgg	ttt	tgg	tgg	gag	aac	agc	cac	gtc	ttc	acg	gat	gca	2127
238	Asp	Gly	Asp	Trp	Phe	Trp	Trp	Glu	Asn	Ser	His	Val	Phe	Thr	Asp	Ala	
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242	Gln	Arg	Arg	Glu	Leu	Glu	Lys	His	Ser	Leu	Ser	Arg	Val	Ile	Cys	Asp	
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254	Glu	Ala	Trp	Arg	Glu	Thr	Phe	Pro	Gln	Asp	Asp	Lys	Cys	Gly	Phe	Pro	
255	730					735					740					745	
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258	Glu	Ser	Val	Glu	Asn	Gly	Asp	Phe	Val	His	Cys	Glu	Glu	Ser	Gly	Arg	
259					750				755					760			
261	cgc	gtg	ctg	gtg	tat	tcc	tgc	cgg	cac	ggg	tat	gag	ctc	caa	ggc	cgg	2415
262	Arg	Val	Leu	Val	Tyr	Ser	Cys	Arg	His	Gly	Tyr	Glu	Leu	Gln	Gly	Arg	
263				765				770						775			
265	gag	cag	ctc	act	tgc	acc	cag	gaa	gga	tgg	gat	ttc	cag	cct	ccc	ctc	2463
266	Glu	Gln	Leu	Thr	Cys	Thr	Gln	Glu	Gly	Trp	Asp	Phe	Gln	Pro	Pro	Leu	
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DATE: 09/10/2001

PATENT APPLICATION: US/08/482,402A

TIME: 16:06:27

Input Set : A:\Pto.amc

Output Set: N:\CRF3\09102001\H482402A.raw

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274 Ala Ser Ala Arg Cys Arg Asn Thr Lys Gly Gly Phe Gln Cys Leu Cys
275 810      815      820      825
277 gcg gac ccc tac gag tta gga gac gat ggg aga acc tgc gta gac tcc 2607
278 Ala Asp Pro Tyr Glu Leu Gly Asp Asp Gly Arg Thr Cys Val Asp Ser
279      830      835      840
281 ggg agg ctc cct cgg gtg act tgg atc tcc atg tgc ctg gct gct ctg 2655
282 Gly Arg Leu Pro Arg Val Thr Trp Ile Ser Met Ser Leu Ala Ala Leu
283      845      850      855
285 ctg atc gga ggc ttc gca ggt ctc acc tcg acg gtg att tgc agg tgg 2703
286 Leu Ile Gly Gly Phe Ala Gly Leu Thr Ser Thr Val Ile Cys Arg Trp
287      860      865      870
289 aca cgc act ggc act aaa tcc aca ctg ccc atc tcg gag aca ggc gga 2751
290 Thr Arg Thr Gly Thr Lys Ser Thr Leu Pro Ile Ser Glu Thr Gly Gly
291      875      880      885
293 gga act ccc gag ctg aga tgc gga aag cac cag gcc gta ggg acc tca 2799
294 Gly Thr Pro Glu Asp Arg Cys Gly Lys His Gln Ala Val Gly Thr Ser
295 890      895      900      905
297 ccg cag cgg gcc gca gct cag gac tcg gag cag gag agt gct ggg atg 2847
298 Pro Gln Arg Ala Ala Ala Gln Asp Ser Glu Gln Glu Ser Ala Gly Met
299      910      915      920
301 gaa ggc cgg gat act cac agg ctg ccg aga gcc ctc tgagggcaaa 2893
302 Glu Gly Arg Asp Thr His Arg Leu Pro Arg Ala Leu
303      925      930
305 gtggcaggac actgcagaa acgttcatgt tcccaaaatc accgtacgac tcttttccaa 2953
307 acacaggcaa atcggaatc agcaggacga ctgttttccc aacacgggta aatctagtag 3013
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324      20      25      30
327 Lys Pro Glu Glu Ser Arg Val Ser Ser Val Leu Glu Glu Ser Lys Arg
328      35      40      45
331 Leu Val Asp Thr Ala Met Tyr Ala Thr Met Gln Arg Asn Leu Lys Lys
332      50      55      60
335 Arg Gly Ile Leu Ser Gly Ala Gln Leu Leu Ser Phe Ser Lys Leu Pro
336 65      70      75      80
339 Glu Pro Thr Ser Gly Val Ile Ala Arg Ala Ala Glu Ile Met Glu Thr
340      85      90      95
343 Ser Ile Gln Ala Met Lys Arg Lys Val Asn Leu Lys Thr Gln Gln Ser
344      100      105      110
347 Gln His Pro Thr Asp Ala Leu Ser Glu Asp Leu Leu Ser Ile Ile Ala

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VERIFICATION SUMMARY

PATENT APPLICATION: US/08/482,402A

DATE: 09/10/2001

TIME: 16:06:28

Input Set : A:\Pto.amc

Output Set: N:\CRF3\09102001\H482402A.raw

OIPE

RAW SEQUENCE LISTING  
 PATENT APPLICATION: US/08/482,402A

DATE: 08/29/2001  
 TIME: 14:17:39

Input Set : A:\ES.txt  
 Output Set: N:\CRF3\08292001\H482402A.raw

Does Not Comply  
 Corrected Diskette Needed

3 <110> APPLICANT: Rapoport, Basil  
 5 <120> TITLE OF INVENTION: DISEASE ASSOCIATED HUMAN AUTOANTIBODIES SPECIFIC FOR HUMAN  
 THYROID  
 6 PEROXIDASE  
 8 <130> FILE REFERENCE: A1697DIV3  
 10 <140> CURRENT APPLICATION NUMBER: 08/482,402A  
 11 <141> CURRENT FILING DATE: 1996-06-07  
 13 <150> PRIOR APPLICATION NUMBER: US 08/196,082  
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 38 <151> PRIOR FILING DATE: 1989-07-31  
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 70 Met Arg Ala Leu Ala Val Leu Ser Val  
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## RAW SEQUENCE LISTING

PATENT APPLICATION: US/08/482,402A

DATE: 08/29/2001

TIME: 14:17:40

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Output Set: N:\CRF3\08292001\H482402A.raw

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78 Gly Lys Glu Leu Leu Trp Gly Lys Pro Glu Glu Ser Arg Val Ser Ser
79 30 35 40
81 gtc ttg gag gaa agc aag cgc ctg gtg gac acc gcc atg tac gcc acg 255
82 Val Leu Glu Glu Ser Lys Arg Leu Val Asp Thr Ala Met Tyr Ala Thr
83 45 50 55
85 atg cag aga aac ctc aag aaa aga gga atc ctt tct gga gct cag ctt 303
86 Met Gln Arg Asn Leu Lys Lys Arg Gly Ile Leu Ser Gly Ala Gln Leu
87 60 65 70
89 ctg tct ttt tcc aaa ctt cct gag cca aca agc gga gtg att gcc cga 351
90 Leu Ser Phe Ser Lys Leu Pro Glu Pro Thr Ser Gly Val Ile Ala Arg
91 75 80 85
93 gca gca gag ata atg gaa aca tca ata caa gcg atg aaa aga aaa gtc 399
94 Ala Ala Glu Ile Met Glu Thr Ser Ile Gln Ala Met Lys Arg Lys Val
95 90 95 100 105
97 aac ctg aaa act caa caa tca cag cat cca acg gat gct tta tca gaa 447
98 Asn Leu Lys Thr Gln Gln Ser Gln His Pro Thr Asp Ala Leu Ser Glu
99 110 115 120
101 gat ctg ctg agc atc att gca aac atg tct gga tgt ctc cct tac atg 495
102 Asp Leu Leu Ser Ile Ile Ala Asn Met Ser Gly Cys Leu Pro Tyr Met
103 125 130 135
105 ctg ccc cca aaa tgc cca aac act tgc ctg gcg aac aaa tac agg ccc 543
106 Leu Pro Pro Lys Cys Pro Asn Thr Cys Leu Ala Asn Lys Tyr Arg Pro
107 140 145 150
109 atc aca gga gct tgc aac aac aga gac cac ccc aga tgg ggc gcc tcc 591
110 Ile Thr Gly Ala Cys Asn Asn Arg Asp His Pro Arg Trp Gly Ala Ser
111 155 160 165
113 aac acg gcc ctg gca cga tgg ctc cct cca gtc tat gag gac ggc ttc 639
114 Asn Thr Ala Leu Ala Arg Trp Leu Pro Pro Tyr Glu Asp Gly Phe
115 170 175 180 185
117 agt cag ccc cga ggc tgg aac ccc ggc ttc ttg tac aac ggg gtc cca 687
118 Ser Gln Pro Arg Gly Trp Asn Pro Gly Phe Leu Tyr Asn Gly Phe Pro
119 190 195 200
121 ctg ccc ccg gtc cgg gag gtg aca aga cat gtc att caa gtt tca aat 735
122 Leu Pro Pro Val Arg Glu Val Thr Arg His Val Ile Gln Val Ser Asn
123 205 210 215
125 gag gtt gtc aca gat gat gac cgc tat tct gac ctc ctg atg gca tgg 783
126 Glu Val Val Thr Asp Asp Asp Arg Tyr Ser Asp Leu Leu Met Ala Trp
127 220 225 230
129 gga caa tac atc gac cac gac atc gcg ttc aca cca cag agc acc agc 831
130 Gly Gln Tyr Ile Asp His Asp Ile Ala Phe Thr Pro Gln Ser Thr Ser
131 235 240 245
133 aaa gct gcc ttc ggg gga ggg tct gac tgc cag atg act tgt gag aac 879
134 Lys Ala Ala Phe Gly Gly Gly Ser Asp Cys Gln Met Thr Cys Glu Asn
135 250 255 260 265
137 caa aac cca tgt ttt ccc ata caa ctc ccg gag gag gcc cgg ccg gcc 927
138 Gln Asn Pro Cys Phe Pro Ile Gln Leu Pro Glu Glu Ala Arg Pro Ala

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## RAW SEQUENCE LISTING

DATE: 08/29/2001

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TIME: 14:17:40

Input Set : A:\ES.txt

Output Set: N:\CRF3\08292001\H482402A.raw

139		270		275		280		
141	gcg	ggc	acc	gcc	tgt	ctg	ccc	ttc
142	Ala	Gly	Thr	Ala	Cys	Leu	Pro	Phe
143				285		290		
145	acc	ggg	gac	caa	ggc	gcg	ctc	ttt
146	Thr	Gly	Asp	Gln	Gly	Ala	Leu	Phe
147		300			305			310
149	agg	cag	cag	atg	aac	ggg	ttg	acc
150	Arg	Gln	Gln	Met	Asn	Gly	Leu	Thr
151		315			320			325
153	tat	ggc	agc	tcc	ccg	gcc	cta	gag
154	Tyr	Gly	Ser	Ser	Pro	Ala	Leu	Glu
155	330				335			340
157	gcc	gaa	ggg	ctg	ctc	cgc	gtc	cac
158	Ala	Glu	Gly	Leu	Leu	Arg	Val	His
159				350				355
161	gcc	tac	ctg	ccc	ttc	gtg	ccg	cca
162	Ala	Tyr	Leu	Pro	Phe	Val	Pro	Pro
163				365				370
165	gag	ccc	ggc	aac	ccc	gga	gag	acc
166	Glu	Pro	Gly	Asn	Pro	Gly	Glu	Thr
167		380						385
169	gac	ggc	cgc	gcc	agc	gag	gtc	ccc
170	Asp	Gly	Arg	Ala	Ser	Glu	Val	Pro
171		395						400
173	tggt	ctg	cgc	gag	cac	aac	cgc	ctg
174	Trp	Leu	Arg	Glu	His	Asn	Arg	Leu
175	410							415
177	gcg	cac	tggt	agc	gcg	gac	gcc	gtg
178	Ala	His	Trp	Ser	Ala	Asp	Ala	Val
179				430				435
181	ggc	gct	ctg	cac	cag	atc	atc	acc
182	Gly	Ala	Leu	His	Gln	Ile	Ile	Thr
183				445				450
185	ctg	gga	ccc	gag	gcc	ttc	cag	cag
186	Leu	Gly	Pro	Glu	Ala	Phe	Gln	Gln
187		460						465
189	gac	tcc	acc	gcc	aac	ccc	act	gtg
190	Asp	Ser	Thr	Ala	Asn	Pro	Thr	Val
191		475						480
193	ttc	cgc	ttc	ggc	cat	gcc	acg	atc
194	Phe	Arg	Phe	Gly	His	Ala	Thr	Ile
195	490							495
197	gcc	agc	ttc	cag	gag	cac	ccc	gac
198	Ala	Ser	Phe	Gln	Glu	His	Pro	Asp
199				510				515
201	gct	ttc	ttc	agc	cca	tggt	aca	tta
202	Ala	Phe	Phe	Ser	Pro	Trp	Thr	Leu
203				525				530

## RAW SEQUENCE LISTING

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TIME: 14:17:40

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Output Set: N:\CRF3\08292001\H482402A.raw

205	cta	ata	cga	ggc	ctt	ctt	gca	aga	cca	gcc	aaa	ctg	cag	gtg	cag	gat	1743
206	Leu	Ile	Arg	Gly	Leu	Leu	Ala	Arg	Pro	Gla	Lys	Leu	Gln	Val	Gln	Asp	
207			540								545					550	
209	cag	ctg	atg	aac	gag	gag	ctg	acg	gaa	agg	ctc	ttt	gtg	ctg	tcc	aat	1791
210	Gln	Leu	Met	Asn	Glu	Glu	Leu	Thr	Glu	Arg	Leu	Phe	Val	Leu	Ser	Asn	
211			555								560					565	
213	tcc	agc	acc	ttg	gat	ctg	gcg	tcc	atc	aac	ctg	cag	agg	ggc	cgg	gac	1839
214	Ser	Ser	Thr	Leu	Asp	Leu	Ala	Ser	Ile	Asn	Leu	Gln	Arg	Gly	Arg	Asp	
215	570						575					580				585	
217	cac	ggg	ctg	cca	ggt	tac	aat	gag	tgg	agg	gag	ttc	tgc	ggc	ctg	cct	1887
218	His	Gly	Leu	Pro	Gly	Tyr	Asn	Glu	Trp	Arg	Glu	Phe	Cys	Gly	Leu	Pro	
219					590						595				600		
221	cgc	ctg	gag	acc	ccc	gct	gac	ctg	agc	aca	gcc	atc	gcc	agc	agg	agc	1935
222	Arg	Leu	Glu	Thr	Pro	Ala	Asp	Leu	Ser	Thr	Ala	Ile	Ala	Ser	Arg	Ser	
223				605						610				615			
225	gtg	gcc	gac	aag	atc	ctg	gac	ttg	tac	aag	cat	cct	gac	aac	atc	gat	1983
226	Val	Ala	Asp	Lys	Ile	Leu	Asp	Leu	Tyr	Lys	His	Pro	Asp	Asn	Ile	Asp	
227			620							625				630			
229	gtc	tgg	ctg	gga	ggc	tta	gct	gaa	aac	ttc	ctc	ccc	agg	gct	cgg	aca	2031
230	Val	Trp	Leu	Gly	Gly	Leu	Ala	Glu	Asn	Phe	Leu	Pro	Arg	Ala	Arg	Thr	
231			635				640							645			
233	ggg	ccc	ctg	ttt	gcc	tgt	ctc	att	ggg	aag	cag	atg	aag	gct	ctg	cgg	2079
234	Gly	Pro	Leu	Phe	Ala	Cys	Leu	Ile	Gly	Lys	Gln	Met	Lys	Ala	Leu	Arg	
235	650					655					660					665	
237	gac	ggt	gac	tgg	ttt	tgg	tgg	gag	aac	agc	cac	gtc	ttc	acg	gat	gca	2127
238	Asp	Gly	Asp	Trp	Phe	Trp	Trp	Glu	Asn	Ser	His	Val	Phe	Thr	Asp	Ala	
239				670						675					680		
241	cag	agg	cgt	gag	ctg	gag	aag	cac	tcc	ctg	tct	cgg	gtc	atc	tgt	gac	2175
242	Gln	Arg	Arg	Glu	Leu	Glu	Lys	His	Ser	Leu	Ser	Arg	Val	Ile	Cys	Asp	
243				685						690				695			
245	aac	act	ggc	ctc	acc	agg	gtg	ccc	atg	gat	gcc	ttc	caa	gtc	ggc	aaa	2223
246	Asn	Thr	Gly	Leu	Thr	Arg	Val	Pro	Met	Asp	Ala	Phe	Gln	Val	Gly	Lys	
247			700						705					710			
249	ttc	ccc	gaa	gac	ttt	gag	tct	tgt	gac	agc	atc	act	ggc	atg	aac	ctg	2271
250	Phe	Pro	Glu	Asp	Phe	Glu	Ser	Cys	Asp	Ser	Ile	Thr	Gly	Met	Asn	Leu	
251			715				720					725					
253	gag	gcc	tgg	agg	gaa	acc	ttt	cct	caa	gac	gac	aag	tgt	ggc	ttc	cca	2319
254	Glu	Ala	Trp	Arg	Glu	Thr	Phe	Pro	Gln	Asp	Asp	Lys	Cys	Gly	Phe	Pro	
255	730					735					740				745		
257	gag	agc	gtg	gag	aat	ggg	gac	ttt	gtg	cac	tgt	gag	gag	tct	ggg	agg	2367
258	Glu	Ser	Val	Glu	Asn	Gly	Asp	Phe	Val	His	Cys	Glu	Gln	Ser	Gly	Arg	
259				750						755					760		
261	cgc	gtg	ctg	gtg	tat	tcc	tgc	cgg	cac	ggg	tat	gag	ctc	caa	ggc	cgg	2415
262	Arg	Val	Leu	Val	Tyr	Ser	Cys	Arg	His	Gly	Tyr	Glu	Leu	Gln	Gly	Arg	
263				765					770					775			
265	gag	cag	ctc	act	tgc	acc	cag	gaa	gga	tgg	gat	ttc	cag	cct	ccc	ctc	2463
266	Glu	Gln	Leu	Thr	Cys	Thr	Gln	Glu	Gly	Trp	Asp	Phe	Gln	Pro	Pro	Leu	
267			780						785					790			
269	tgc	aaa	gat	gtg	aac	gag	tgt	gca	gac	ggt	gcc	cac	ccc	ccc	tgc	cac	2511

## RAW SEQUENCE LISTING

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TIME: 14:17:40

Input Set : A:\ES.txt

Output Set: N:\CRF3\08292001\H482402A.raw

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270 Cys Lys Asp Val Asn Glu Cys Ala Asp Gly Ala His Pro Pro Cys His
271 795 800 805
273 gcc tct gcg agg tgc aga aac acc aaa ggc ggc ttc cag tgt ctc tgc 2559
274 Ala Ser Ala Arg Cys Arg Asn Thr Lys Gly Gly Phe Gln Cys Leu Cys
275 810 815 820 825
277 gcg gac ccc tac gag tta gga gac gat ggg aga acc tgc gta gac tcc 2607
278 Ala Asp Pro Tyr Glu Leu Gly Asp Asp Gly Arg Thr Cys Val Asp Ser
279 830 835 840
281 ggg agg ctc cct cgg gtg act tgg atc tcc atg tcg ctg gct gct ctg 2655
282 Gly Arg Leu Pro Arg Val Thr Trp Ile Ser Met Ser Leu Ala Ala Leu
283 845 850 855
285 ctg atc gga ggc ttc gca ggt ctc acc tcg acg gtg att tgc agg tgg 2703
286 Leu Ile Gly Gly Phe Ala Gly Leu Thr Ser Thr Val Ile Cys Arg Trp
287 860 865 870
289 aca cgc act ggc act aaa tcc aca ctg ccc atc tcg gag aca ggc gga 2751
290 Thr Arg Thr Gly Thr Lys Ser Thr Leu Pro Ile Ser Glu Thr Gly Gly
291 875 880 885
293 gga act ccc gag ctg aga tgc gga aag cac cag gcc gta ggg acc tca 2799
294 Gly Thr Pro Glu Leu Arg Cys Gly Lys His Gln Ala Val Gly Thr Ser
295 890 895 900 905
297 ccg cag cgg gcc gca gct cag gac tcg gag cag gag agt gct ggg atg 2847
298 Pro Gln Arg Ala Ala Ala Gln Asp Ser Glu Gln Glu Ser Ala Gly Met
299 910 915 920
301 gaa ggc cgg gat act cac agg ctg ccg aga gcc ctc tgagggcaaa 2893
302 Glu Gly Arg Asp Thr His Arg Leu Pro Arg Ala Leu
303 925 930
305 gtggcaggac actgcagaac agcttcattgt tcccaaaatc accgtacgac tcttttccaa 2953
307 acacaggcaa atcggaatc agcaggacga ctgttttccc aacacgggta aatctagtag 3013
309 catgtcgtag ttactctcag gcatggatga ataaatgtta tagctgcaaa aaaaaaaaaa 3072
312 <210> SEQ ID NO: 3
313 <211> LENGTH: 933
314 <212> TYPE: PRT
315 <213> ORGANISM: Homo sapiens
317 <400> SEQUENCE: 3
319 Met Arg Ala Leu Ala Val Leu Ser Val Thr Leu Val Met Ala Cys Thr
320 1 5 10 15
323 Glu Ala Phe Phe Pro Phe Ile Ser Arg Gly Lys Glu Leu Leu Trp Gly
324 20 25 30
327 Lys Pro Glu Glu Ser Arg Val Ser Ser Val Leu Glu Glu Ser Lys Arg
328 35 40 45
331 Leu Val Asp Thr Ala Met Tyr Ala Thr Met Gln Arg Asn Leu Lys Lys
332 50 55 60
335 Arg Gly Ile Leu Ser Gly Ala Gln Leu Leu Ser Phe Ser Lys Leu Pro
336 65 70 75 80
339 Glu Pro Thr Ser Gly Val Ile Ala Arg Ala Ala Glu Ile Met Glu Thr
340 85 90 95
343 Ser Ile Gln Ala Met Lys Arg Lys Val Asn Leu Lys Thr Gln Gln Ser
344 100 105 110
347 Gln His Pro Thr Asp Ala Leu Ser Glu Asp Leu Leu Ser Ile Ile Ala

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VERIFICATION SUMMARY

PATENT APPLICATION: US/08/482,402A

DATE: 08/29/2001

TIME: 14:17:41

Input Set : A:\ES.txt

Output Set: N:\CRF3\08292001\H482402A.raw